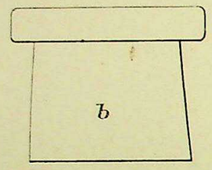
A.D. 1868, JAN. 20, Nº 192,
DOLBY'S SPECIFICATION.

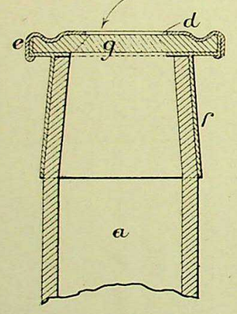
FRANKLIN INSTITUTE LIBRARY.

FIG. 1.



Side View

FIG. 2.



Section

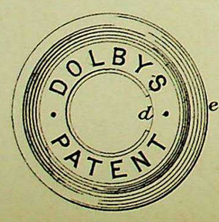
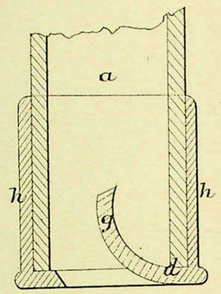


FIG. 3.

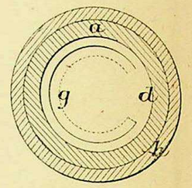
Plan

FIG. 11.



Section

FIG. 12.



Plan

FIG. 4.

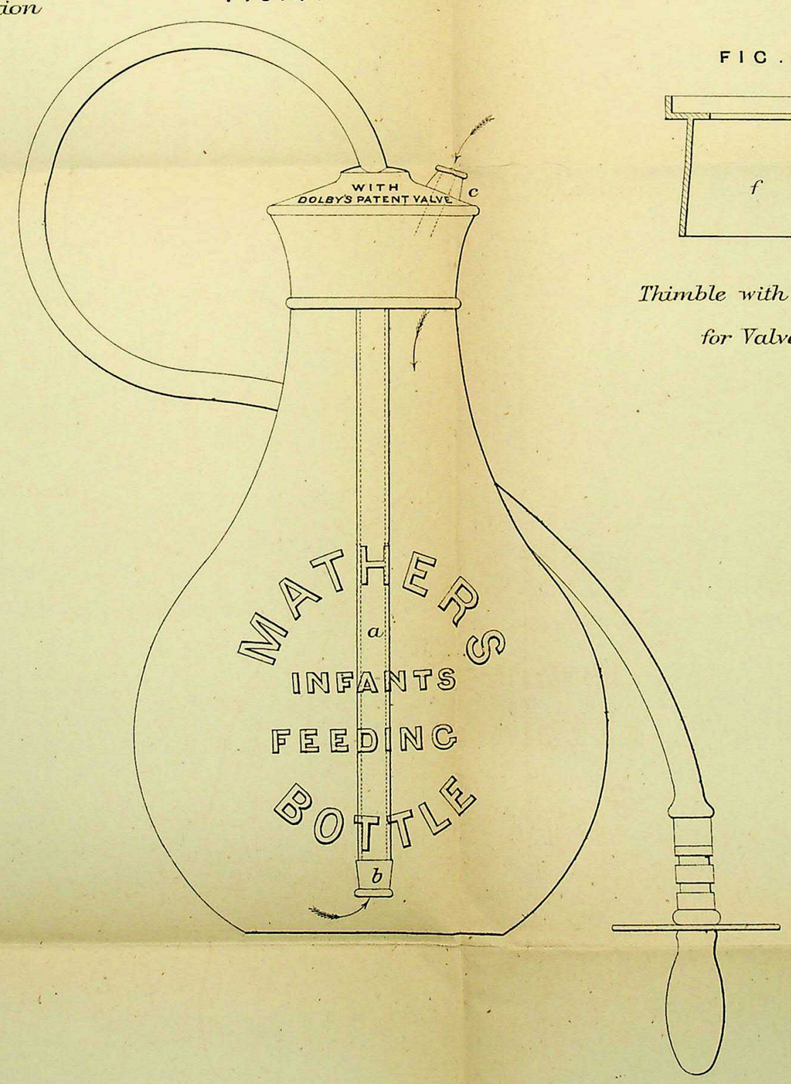
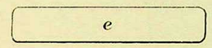
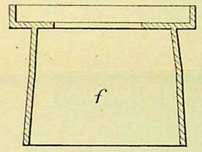


FIG. 9.



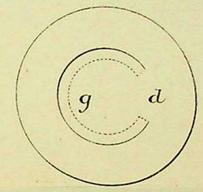
Cap

FIG. 10.



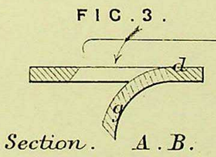
Thimble with Seating for Valve

FIG. 7.



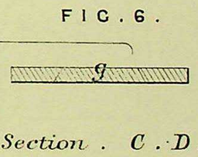
Plan of Valve

FIG. 3.



Section . A . B.

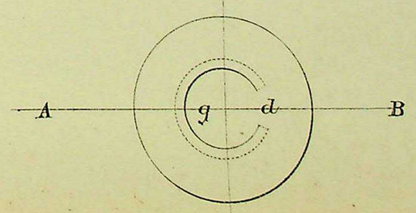
FIG. 6.



Section . C . D.

D

FIG. 6.



Plan of Valve

C

The filed drawing is partly colored.

Drawn on Stone by Malby & S.

LONDON: Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1868

A.D. 1868, *20th January.* N° 192.

Feeding Bottles.

FRANKLIN INSTITUTE LIBRARY.

LETTERS PATENT to Thomas George Fonnereau Dolby, Manufacturing Goldsmith, 14, Old Town, Clapham Parish, in the County of Surrey, for the Invention of "IMPROVEMENTS IN FEEDING BOTTLES."

Sealed the 10th July 1868, and dated the 20th January 1868.

PROVISIONAL SPECIFICATION left by the said Thomas George Fonnereau Dolby at the Office of the Commissioners of Patents, with his Petition, on the 20th January 1868.

I, THOMAS GEORGE FONNEREAU DOLBY, Manufacturing Goldsmith, 14, Old Town, Clapham Parish, in the County of Surrey, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN FEEDING BOTTLES," to be as follows:—

This Invention has for its object improvements in feeding bottles and other similar articles, and consists in placing a conical or other shaped valve of india-rubber or other suitable material in the cap, neck, top, or

other convenient part of the bottle for admitting fresh air and preventing the food from escaping; and a similar valve may also be applied to the top or bottom of the tube through which the food passes to the child's mouth and prevents the return of the breath into the bottle.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Thomas George Fonnereau Dolby in the Great Seal Patent Office on the 13th July 1868.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, THOMAS GEORGE FONNEREAU DOLBY, of Number 14, Old Town, Clapham Parish, Goldsmith, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twentieth day of January, in the year of our Lord One thousand eight hundred and sixty-eight, in the thirty-first year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Thomas George Fonnereau Dolby, Her special licence, that I, the said Thomas George Fonnereau Dolby, my executors, administrators, and assigns, or such others, as I, the said Thomas George Fonnereau Dolby, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN FEEDING BOTTLES," upon the condition (amongst others) that I, the said Thomas George Fonnereau Dolby, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Thomas George Fonnereau Dolby, do hereby declare the nature of my said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, reference being had to the accom-

panying Drawing, and to the letters and figures marked thereon, that is to say :—

My said Invention has for its object improvements in feeding bottles, and consists in placing a conical or other shaped valve of vulcanized india-rubber or other elastic and flexible material in the cap, neck, top, or other convenient part of the bottle, admitting atmospheric air and preventing the food from escaping ; or a valve may be applied to the top or bottom or any part of the tube through which the food passes to the child's mouth, thereby preventing the passing of the child's breath into the bottle.

I find that the best mode of attaching the valve is to affix the same at the bottom of the glass or other tube in the bottle conducting the fluid to the child's mouth.

That my improvements may be clearly understood I proceed to describe the mode by which I form the valve or valves, that is to say, I take a piece of vulcanized india-rubber in sheet or other elastic and flexible material of the desired thickness, I find $\frac{1}{24}$th of an inch answers very well, and therein make a bevilled or inclined cut or incision of curvilinear or other form through the vulcanized india-rubber or other material, so that one side is left larger than the other, as shewn in Fig. 5, which shews the valve open and in Fig. 6 closed, nothing being cut out in making the tongue of the valve, but by one cut being sufficiently separated to serve the purpose intended, the uncut portion forming the hinge and spring combined, as shewn in Figs. 5, 7, 8, and 12, letter D, by which the closing power is obtained, thus making a complete fitting self-acting valve, whose action is equally perfect in any position, as its opening or closing is dependent on the elastic and resilient power of the material employed, and not upon its weight or other mechanical force as in the valves ordinarily employed, while it is equally applicable for admitting the passage of thick or thin fluids.

The valve or valves may be enclosed in or covered by metallic or other suitable material so as to protect and insure its free action, as shewn in Figs. 9 and 10, or a moulded piece of vulcanized india-rubber or other elastic material in which the valve has been cut may be employed to fit on the tube, as shewn, Fig. 11 ; and for the more convenient application to the tubes of glass or other material used in feeding bottles or other vessels through which the food passes, as shewn, Fig. 4, letter A, or for

the purpose of admitting fresh air, as shewn, Fig. 4, letter C, the valves may have a tapered or other shaped tube attached thereto, as shewn in Fig. 10, letter *f*, and as ordinarily employed for such purposes.

In witness whereof, I, the said Thomas George Fonnereau Dolby, have hereunto set my hand and seal, this Twenty-ninth day of June, in the year of our Lord One thousand eight hundred and sixty-eight.

THOMAS GEORGE FONNEREAU DOLBY. (L.S.)

Witness,

FREDERIC WEATHERALL,
Temple,
London,
Solr.

LONDON:
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1868.